

REMARKS

Claims 4, 5 and 13-17 are pending in this application. By this Amendment, claims 1-3 and 6-12 are canceled without prejudice to or disclaimer of the subject matter recited therein. Claims 4 and 5 are amended, and claims 13-17 are added. Support for the amended and newly added claims may be found throughout the specification and at least at page 16, lines 5-10, as well as in the descriptions of the first and second embodiments. Thus, no new matter is added.

I. Drawings

The drawings are objected to under 37 C.F.R. §1.83(a) for allegedly failing to show each and every feature recited in the claims. Specific language recited in claims 1 and 6 is cited as failing to be shown in the figures. As claims 1 and 6 are canceled, objection to the drawings based on the subject matter of those claims is moot. However, Fig. 12 is revised to label the rectifier units as reference numbers 51, 52, as well as to provide reference numbers for the armature windings 231, 232 as depicted in the originally filed figures.

II. Specification

The specification is objected to for allegedly failing to provide proper antecedent basis for the claimed subject matter under 37 C.F.R. §1.75(d)(1). Specific language recited in claim 6 is referenced as providing the basis for the objection to the specification. As claim 6 is canceled, the objection to the specification based on that claim language is moot. However, the specification is amended at page 16, beginning at line 5 to include the newly added reference numbers for the armature windings and rectifier units shown in Fig. 12.

III. Claim Rejections Under 35 U.S.C. §112

Claims 1 and 6 are rejected under 35 U.S.C. §112, first paragraph and second paragraph. As claims 1 and 6 are canceled, the rejection of those claims is moot.

IV. Claim Rejections Under 35 U.S.C. §102

Claims 1-12 are rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent 6,570,289 to Liang et al. As claims 1-3 and 6-12 are canceled, the rejection of those claims is moot. The rejection of claims 4 and 5 is respectfully traversed.

Liang fails to disclose a rotary electric machine, comprising a cylindrical stator core; and a pair of armature windings mounted in said stator core, wherein each said armature winding has a first group of Δ -connected three-phase windings having junctions that are $2\pi/3$ in electric angle different from each other and a second group of three-phase windings having output ends that are $2\pi/3$ in electric angle different from each other and input ends respectively connected in series to said junctions of said first group.

Additionally, Liang fails to disclose a rotary electric machine including a cylindrical stator core having an axial end surface, an armature winding mounted in said stator core and a pair of three-phase rectifier units, wherein said armature winding having a pair of three-phase sub-armature windings and six output terminals respectively connected to said three-phase rectifiers; each of said sub-armature windings comprises a first group of Δ -connected three-phase windings having junctions that are different in electric angle from each other and a second group of three-phase windings having output ends that are different in electric angle from each other and are connected to one of said rectifier units and input ends respectively connected in series to said junctions of said first group; and said pair of three-phase sub-armature windings is disposed in said stator core so that said six output terminals are different in electric angle from each other.

Regarding the rejection of claim 5, the Office Action alleges that Liang teaches a pair of armature windings, as well as a first group of Δ -connected three-phase windings and a second group of three-phase windings. However, Liang fails to disclose either a pair of armature windings or first and second groups of three-phase windings as recited in the

unamended claim. For example, Fig. 5 of Liang discloses a schematic view of a winding according to the invention of Liang (col. 3, lines 5 and 6). The stator circuit 300 shown in Fig. 5 is coupled to a rectifier circuit 302. The winding circuit, although disclosing two sets of three phase windings fails to show a pair of armature windings mounted in the stator core wherein each of the armature windings has a first group of Δ -connected three-phase windings having junctions that are $2\pi/3$ in electric angle from each other and a second group of three-phase windings having output ends that are $2\pi/3$ in electric angle different from each other and input ends respectively connected in series to the junctions of the first group.

Additionally, regarding the amended language of claim 5, Liang fails to disclose a first group of Δ -connected three-phase windings having three junctions and a second group of three-phase windings having three output ends that are $2\pi/3$ in electric angle from each other and three input ends respectively connected in series to the junctions of the first group, and the three output ends are connected to one of the pair of rectifier units.

Claim 4 is allowable for its dependency on independent claim 13 for the reason discussed below, as well as for the additional features recited therein. Thus, withdrawal of the rejection of claims 1-12 under 35 U.S.C. §102(e) is respectfully requested.

V. New Claims

Liang fails to disclose each and every feature recited in claims 13-17. For example, Liang fails to disclose or suggest a rotary electric machine including a cylindrical stator core having an axial end surface, an armature winding mounted in said stator core and a pair of three-phase rectifier units, wherein said armature winding having a pair of three-phase sub-armature windings and six output terminals respectively connected to said three-phase rectifiers; each of said sub-armature windings comprises a first group of Δ -connected three-phase windings having junctions that are different in electric angle from each other and a second group of three-phase windings having output ends that are different in electric angle

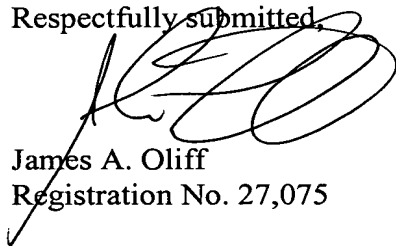
from each other and are connected to one of said rectifier units and input ends respectively connected in series to said junctions of said first group; and said pair of three-phase sub-armature windings is disposed in said stator core so that said six output terminals are different in electric angle from each other.

VI. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 4, 5 and 13-17 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,


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JAO:JWF/ldg

Attachments:

Replacement Sheet
Petition for Extension of Time

Date: March 2, 2005

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<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
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Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Fig. 12 and replaces the original sheet with Fig. 12.

Attachment: Replacement Sheet